measles immunization is as much as 95% effective,[11] a 5% vaccine failure rate is still too high for a disease as infectious as measles. Even with this low vaccine failure rate and with a well-enforced school-entry requirement, one-dose measles immunization has been inadequate to prevent school measles outbreaks among the remaining susceptible pupils.[12] The accumulation of susceptible persons in a population resulting from this vaccine failure rate has also been associated with recurrent community-wide measles outbreaks.[13] It should also be noted that during California's 1988-1991 measles epidemic, more than 3,500 cases occurred in school-aged children, almost half of whom had previously been immunized. In response to this problem, 40 other states have changed their school-entry measles immunization requirement from one to two doses. California should give serious consideration to doing the same.

If California is successful in immunizing at least 90% of its children against measles in their second year of life and in ensuring the receipt of a second dose of measles-containing vaccine by nearly all children through a school-entry immunization requirement, the devastating 1988-1991 measles epidemic could prove to be California's last one.

NATALIE J. SMITH, MD, MPH
LORING G. DALES, MD, MPH
STEPHEN H. WATERMAN, MD, MPH
Division of Communicable Disease Control
California Department of Health Services
Berkeley, California

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Progress in Treatments for Substance-Impaired Physicians

THE PUBLICATION OF "Substance-Impaired Physicians—Probationary and Voluntary Treatment Programs Compared" by Nelson and colleagues in this issue of THE WESTERN JOURNAL OF MEDICINE highlights continuing progress in effective treatments for impaired physicians.[1] The comparison of probationary and voluntary groups in this study addresses critical public policy outcomes. These issues have been debated since changes in treatments for impaired physicians in the 1970s. The study focuses our attention on probationary treatment under a state board of medical examiners and compares it with voluntary treatment under an independent state physician health program. It assists us in refocusing on the important debate concerning protection of the public through coerced probationary treatment versus voluntary treatment that can occur at an earlier stage of intervention. We should pay close attention to the lessons here because they may guide us to more effective interventions that can save the health and careers of hundreds of physicians while safeguarding the public.

Since the 1970s, there has been considerable progress in developing and evaluating interventions for impaired physicians. Leadership has come from the American Medical Association, some state medical boards, and professional societies. In the West, model programs have been developed in Oregon, Washington, California, Arizona, and Colorado. The treatment method of contingency contracting is widely accepted. This method involves a patient consent agreement that links monitored drug abstinence to continued medical licensure. Another critical issue is a comprehensive assessment of impaired physicians to identify all comorbid medical and psychiatric disorders. Unfortunately, this goal is not accomplished in all programs; the tension between "addiction" and "psychiatric" treatments continues to inhibit comprehensive assessment and care in some treatment settings. To treat an addictive disorder without dealing with other possible complicating psychiatric conditions—for example, major depression—is short-sighted and ineffective. Despite these problems, treatment effectiveness for impaired physicians as reported in the outcome research is outstanding. It is 80% or above in several studies. Whereas special groups such as airline pilots and physicians cannot be compared with other patient groups because of the intensity of their monitored supervision, the success of some state board programs in combination with voluntary physician health programs provides stellar examples of both public accountability and humane treatment with vocational rehabilitation.

The Nelson study compared characteristics and treatment outcomes of substance-impaired physicians in Oregon. This is a retrospective, nonrandomized, clinical method comparing the cases of 97 physicians who were treated either in the state board probationary program or in a voluntary diversion program. Results were positive for both groups. The study identified a cohort effect with the voluntary diversion group, including a younger group

and more trainees, suggesting earlier intervention. There was evidence, however, that the board probationary group had a more complicated prognosis, perhaps contributing to their probationary status in the first place. The authors also provide a valuable reference by summarizing and comparing results from 12 impaired physician programs from around the country.

The Oregon study should reassure state medical boards that collaboration with voluntary physician health programs may identify impaired physicians at an earlier stage of intervention and prevent progression of the addictive or psychiatric disorder. Because this retrospective method is typical of impaired physician program research, however, the study also calls attention to current limitations in treatment outcome research in this subspecialty area. Such studies cannot definitively address many important questions, such as exact comparison of risk factors and policy questions concerning public protection versus rehabilitation. The field needs to review seriously and advocate for research studies with methods that move beyond retrospective comparisons of medical records to prospective studies with carefully matched samples. In addition, this study and others have shown substantially positive results from the partnerships between some state medical boards and their corresponding voluntary physicians health programs that identify impaired physicians early and divert them away from a probationary licensure status. The high variation of these studies among states highlights the national inconsistency in our approach to impaired physicians. In my opinion, this inconsistency becomes an indefensible position for both public policy and rehabilitation. At this time, we need a definitive national survey that evaluates the status of probationary and voluntary programs on a state-by-state basis with the goal of standardizing the referral-assessment-treatment approaches. Our outcome data are now sufficiently comprehensive to support a national initiative that both protects the public and saves additional physician lives and careers.

JAMES H. SHORE, MD
Professor and Chair
Department of Psychiatry
Superintendent
Colorado Psychiatric Hospital
University of Colorado Health Sciences Center
Denver

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